

# **ABSTRACT**

A method of performing a simmer cooking operation in a microwave oven is based on detected levels of humidity from a sensor and an algorithm automatically calculating a cooking time such that a desired cooking operation is optimally performed. A third heating operation is performed at about 30% of the maximum power level of the microwave oven. The third heating operation is performed for an amount of time equal to a sum of an amount of time during which first and second heating operations are performed adjusted by a predetermined constant. The total heating time is calculated and controlled by adding the amount of time during which the third heating operation is performed to the time during which the first and second heating operations are performed.